

CLAIMS

What is claimed is:

- 5 *sub a* 1. A vehicle interaction communication system, comprising:
a wireless transmitter;
a digitized measurement of an operational aspect of a
moving vehicle; and
a controller adapted to format said digitized measurement
and transmit said formatted digitized measurement using said wireless
10 transmitter to an external device.
- 15 2. The vehicle interaction communication system according
to claim 1, further comprising:
a wireless receiver in an adjacent vehicle; and
a display in said adjacent vehicle adapted to display a
parameter relating to said digitized measurement.
- 20 3. The vehicle interaction communication system according
to claim 1, further comprising:
a wireless receiver adapted to receive a signal from a
wireless transmitter fixed to a roadway.
- 25 4. The vehicle interaction communication system according
to claim 3, further comprising:
a database compiled from received measurements from a
plurality of moving vehicles received when each of said plurality of moving
vehicles are within range of said wireless receiver.

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227 5. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is a current speed of said moving vehicle.

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6. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is a current direction of said moving vehicle.

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7. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is a location of said moving vehicle.

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8. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is an indication of braking of said moving vehicle.

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9. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is an indication of measured slippage of at least one wheel of said moving vehicle.

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10. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is an indication of a lane occupied by said moving vehicle.

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11. The vehicle interaction communication system according to claim 1, wherein:

said operational aspect of said moving vehicle is an indication of performance of said moving vehicle.

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12. The vehicle interaction communication system according to claim 1, wherein:

said wireless transmitter utilizes a Bluetooth protocol.

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13. The vehicle interaction communication system according to claim 1, further comprising:

a wireless receiver; and

a display adapted to display a parameter relating to an operational aspect of an another vehicle.

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14. The vehicle interaction communication system according to claim 1, further comprising:

a navigational system in communication with said controller, said navigational system being automatically responsive to traffic data received over said wireless receiver without driver intervention.

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sub 03 15. A method of communicating status information between moving vehicles, comprising:

measuring an operational aspect of a first vehicle in operation on a roadway;

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establishing a local area network including said first vehicle;

and

transmitting said measured operational aspect over said local area network.

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16. The method of communicating status information between moving vehicles according to claim 15, wherein:

said measured operational aspect is transmitted to a second vehicle in operation on said roadway.

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17. The method of communicating status information between moving vehicles according to claim 15, wherein:

said second vehicle is adjacent said first vehicle.

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18. The method of communicating status information between moving vehicles according to claim 15, wherein:

said second vehicle is within about 30 meters of said first vehicle.

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19. The method of communicating status information between moving vehicles according to claim 15, wherein:

said operational aspect is a signal light status.

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20. The method of communicating status information between moving vehicles according to claim 15, wherein:

said operational aspect is an operational speed.

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21. The method of communicating status information between moving vehicles according to claim 15, further comprising:

establishing a temporary communication network between said first vehicle and said second vehicle.

22. The method of communicating status information between moving vehicles according to claim 15, further comprising:

establishing a communication network between a plurality of vehicles in motion on a roadway.

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23. The method of communicating status information between moving vehicles according to claim 22, wherein:

said communication network is a Bluetooth piconet.

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24. The method of communicating status information between moving vehicles according to claim 15, wherein:

said step of transmitting utilizes a Bluetooth protocol.

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25. A method of compiling real-time traffic data from moving vehicles, comprising:

establishing a temporary network with a transceiver in a moving vehicle;

causing measured internal vehicle data relating to an operational aspect of a vehicle in operation on a roadway from within said vehicle traveling on said roadway;

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transmitting said measured internal vehicle data to said fixed transceiver over said temporary network; and

compiling said measured internal vehicle data from a plurality of vehicles as real-time traffic data.

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a4 } 26. Apparatus for communicating status information
between moving vehicles, comprising:

means for measuring an operational aspect of a first vehicle
in operation on a roadway, and

5 means for transmitting said measured operational aspect to
a second vehicle in operation on said roadway.

27. Apparatus for compiling real-time traffic data from
moving vehicles, comprising:

10 means for establishing a temporary network with a
transceiver in a moving vehicle;

means for causing measured internal vehicle data relating to
an operational aspect of a vehicle in operation on a roadway from within
said vehicle traveling on said roadway;

15 means for transmitting said measured internal vehicle data
to said fixed transceiver over said temporary network; and

means for compiling said measured internal vehicle data
from a plurality of vehicles as real-time traffic data.

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a5 } 28. A road mounted transmitter, comprising:

a fixed value relating to a current speed limit; and

an RF transmitter adapted to transmit said fixed value to
passing vehicles.

25 29. The road mounted transmitter according to claim 28,
wherein:

said RF transmitter is adapted to establish a local area
network with a passing vehicle.

30. The road mounted transmitter according to claim 29,
wherein:

said local area network is a piconet.

5 31. The road mounted transmitter according to claim 28,
wherein:

said RF transmitter utilizes a Bluetooth protocol.

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ab 32. Apparatus comprising:
a vehicle; and
a wireless communication system within said vehicle, said
wireless communication system comprising:
a wireless transmitter,
a digitized measurement of an operational
15 aspect of a moving vehicle, and
a controller adapted to format said digitized
measurement and transmit said formatted digitized
measurement using said wireless transmitter to a device
external to a vehicle including said vehicle interaction
20 communication system.

33. A method of controlling a vehicle, comprising:
establishing a local area network;
receiving an operational aspect of a vehicle over said local
25 area network; and
adjusting a driver control of said vehicle based on said
received operational aspect of said vehicle.

34. The method of controlling a vehicle according to claim 33, wherein said adjusted driver control comprises at least one of:

acceleration of said vehicle;

braking of said vehicle; and

5 steering of said vehicle.

35. The method of controlling a vehicle according to claim 33, wherein said adjusted driver control comprises:

a display for use of a driver of said vehicle.

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36. A system for communicating with a passing vehicle on a roadway, comprising:

a wireless transmitter having an antenna in a vicinity of a roadway sign; and

15 sign identification data for transmission by said wireless transmitter relating to information contained on said roadway sign.

37. The system for communicating with a passing vehicle on a roadway according to claim 36, wherein:

20 said wireless transmitter includes a receiver; and

said wireless transmitter and receiver establishing a local area network with an approaching vehicle.

38. The system for communicating with a passing vehicle on a roadway according to claim 36, wherein:

25 said roadway sign is a stop sign; and

said data relates to a directive for an approaching vehicle to stop.

39. The method for informing a moving vehicle regarding an approaching roadway sign according to claim 36, wherein:

said roadway sign is a speed limit sign; and

5 said data relates to a speed directive for an approaching vehicle.

40. A method for informing a moving vehicle regarding an approaching roadway sign, comprising:

10 establishing a local area network with an approaching vehicle; and

transmitting information regarding information contained in a roadway sign which said vehicle is approaching.

41. The method for informing a moving vehicle regarding an approaching roadway sign according to claim 40, further comprising:

15 displaying in said approaching vehicle a relevant speed limit received over said local area network.

42. The method for informing a moving vehicle regarding an approaching roadway sign according to claim 40, further comprising:

20 displaying in said approaching vehicle a difference between a current rate of speed of said approaching vehicle and said relevant speed limit received over said local area network.

43. Apparatus for informing a moving vehicle regarding an approaching roadway sign, comprising:

25 means for establishing a local area network with an approaching vehicle; and

30 means for transmitting information regarding information contained in a roadway sign which said vehicle is approaching.

